

86 and (2) because it involves the end-to-end leasing of Qwest's facilities, UNE-P
87 provides CLECs access to the customer's loop in much the same manner as that
88 available to Qwest.⁵ Further, much of the success of UNE-P must be attributed to
89 the cooperation, however reluctant, on the part of Qwest to overcome operational
90 and business-related barriers, based at least in part on its desire for §271 relief in
91 New Mexico and the other 13 in-region states.

92 To assume that the more challenging operational, technical, and network
93 hurdles associated with UNE-L, which requires the connection of an unbundled
94 loop facility with the CLEC's switch, will be overcome in a mere nine-month
95 timeframe is not reasonable. Further, to assume such hurdles can be overcome in
96 this limited timeframe without incentives on the part of Qwest that has, for the
97 most part, already been released from market restrictions via §271 proceedings, is
98 even more difficult to support.⁶ It is more logical to assume that the operational
99 and technological issues giving rise to impairment will be resolved over time, and
100 true loop portability – as described throughout this testimony – will become a
101 reality only with the guidance and oversight of state commissions and proper
102 incentives for Qwest cooperation.

103 **Q. ARE THERE PARTICULAR ISSUES THE COMMISSION SHOULD**
104 **KEEP IN MIND RELATIVE TO IMPAIRMENT FOR MASS MARKET**
105 **SWITCHING AND EFFORTS MADE TO MITIGATE THAT**
106 **IMPAIRMENT OVER TIME?**

107 **A. Yes.** To the extent this Commission determines that the UNE-L strategy should
108 become more widely implemented, it must recognize that transferring a

⁵ Here, "commercially viable" is meant to address efficiency (from both Qwest and CLEC perspectives).

customer's service from the local switch of one carrier to that of another relies upon numerous Operation Support System ("OSS") processes and procedures, as well as the availability and reliability of network elements, comprising a chain of connectivity between the customer and his/her local service provider of choice. Because of this necessary chain of connectivity, even if one assumes that Qwest's hot cut processes can become seamless and efficient at some point in the future, CLECs are likely to remain impaired as a result of numerous operational and technological issues affecting loops, collocation, and transport.⁷ Hence, it is imperative that the Commission remain focused on each of these issues when evaluating impairment and keep an unwavering eye on the primary objective—to ensure that mass market consumers can, at ever increasing volumes, transfer their services from one facilities-based local service provider to another without service disruption or other service impacting problems.

Q. ARE THERE BENCHMARKS AGAINST WHICH UNE-L PROVISIONING PROCESSES, LIKE THE BATCH HOT CUT PROCESS, SHOULD BE MEASURED RELATIVE TO THE SEAMLESSNESS AND RELIABILITY YOU ALLUDE TO ABOVE?

A. Yes. Throughout this testimony, I will point the Commission to the largely seamless and reliable nature of the existing UNE-P process as the benchmark to which UNE-L provisioning processes should be held if the impairment finding is to be overcome. A move to UNE-L as a mass market delivery method cannot occur until Qwest's processes can support the seamless and reliable provisioning

reliability, timeliness, and economics.

⁶ For example, Qwest received 271 approval for New Mexico on April 15, 2003.

⁷ Indeed, the FCC found that hot cuts are not the only issue that may give rise to impairment. For instance, see paragraph 476 of the TRO.

131 of loops to multiple carriers at commercial volumes on a day-to-day basis,
132 consistent with the manner in which they currently accommodate CLEC orders
133 via UNE-P. MCI recommends that the Commission maintain the national finding
134 of impairment throughout all telecommunications markets in the State of New
135 Mexico until such time as UNE-L can realistically replace UNE-P as a tool for
136 serving mass market customers. This will, at a minimum, require resolution of
137 the many operational issues that I address in the remainder of this testimony, as
138 well as those discussed by MCI witnesses, Cox and Cabe.

139 Q. THERE IS A GOOD DEAL OF DISCUSSION IN THE FCC'S *TRIENNIAL*
140 *REVIEW ORDER* REGARDING "TRIGGERS" AND ANALYSIS
141 RELATED TO "ACTUAL DEPLOYMENT." IS YOUR TESTIMONY
142 RELEVANT TO THOSE ISSUES?

143 A. Absolutely. As Dr. Cabe discusses in his testimony, the trigger analysis is meant
144 to examine whether mass markets consumers have three real and current choices
145 available to them through facilities-based carriers.⁸ The stated intention of the
146 trigger analysis is to give weight to evidence that carriers in the real world are
147 actively providing service to mass market customers without UNE-P, and that
148 those carriers could continue to serve mass market customers within the entire
149 identified market if UNE-P were discontinued. If these "triggering" carriers are
150 able to provide services without UNE-P within the relevant market today and have
151 the ability to continue providing it in the future, those alleged "triggering"
152 companies must have overcome operational issues related to accessing Qwest's
153 loop facility. Nonetheless, to qualify as a legitimate "trigger," the carrier would
154 be required to overcome these obstacles on a going forward basis,⁹ and perhaps to
155 overcome them in areas of the market where it does not currently offer services.¹⁰
156
157 In evaluating the legitimacy of an identified trigger, the Commission needs to
158 understand what operational issues exist relative to a UNE-L delivery strategy,

⁸ Or in a less likely circumstance, whether carriers have two wholesale alternatives from facilities based carriers within the relevant market.

⁹ See TRO at paragraph 500 where the FCC states: "The key consideration to be examined by state commissions is whether the providers are currently offering and able to provide service, *and are likely to continue to do so.*" (Emphasis added). See also paragraph 495 of the TRO that also addresses "...customers actually being served."

¹⁰ See TRO at paragraph 499 where the FCC states: "They should be capable of economically serving the entire market, as that market is defined by the state commission. This prevents counting switch providers that provide services that are desirable only to a particular segment of the market."

and how the identified trigger company overcomes those obstacles throughout the market, both today and in the future.

Q. PLEASE BRIEFLY SUMMARIZE YOUR CONCLUSIONS.

A. As discussed in Ms. Page's testimony, MCI intends to move toward serving its mass market customers using its own switching, collocation and transport facilities in combination with Qwest-provided unbundled loops. MCI intends to pursue this strategy in locations where certain operational and economic hurdles can be overcome and when it is operationally and economically feasible. However, this strategy is critically dependent upon reliable access to the customer's loop, OSS, processes, procedures and other facilities needed to ensure that loops can be successfully extended to CLEC switching facilities and maintained on an on-going basis.

Q. ARE THE ISSUES YOU ARE ALLUDING TO ALLEVIATED WITH AN EFFECTIVE HOT CUT PROCESS?

A. No, they are not. While an improved hot cut process is critical to a workable UNE-L platform, numerous other operational issues give rise to the impairment CLECs face today without access to UNE switching. The Commission should recognize that moving from a UNE-P to a UNE-L strategy requires a true paradigm shift for both the CLEC and the underlying loop provider, Qwest. And, based upon the operational issues described in this testimony, as well as the customer impacting issues discussed in Mr. Cox's testimony, MCI would be uncomfortable migrating its UNE-P customer base to a UNE-L strategy in the

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**DIRECT TESTIMONY
OF
RICHARD CABE
ON BEHALF OF
WORLDCOM, INC. ("MCI")**

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25 aspiring new entrants into local telecommunications markets, state commissions, and
26 consumer advocates.

27 Finally, I am not a lawyer, and to the extent I discuss orders of the FCC or courts
28 or the New Mexico Public Regulation Commission, or evidence presented to those
29 bodies, I provide citations and the text referred to speaks for itself and controls anything I
30 express in my testimony. I am not, therefore, attempting to offer legal opinions, but
31 rather citing to the language to provide a context for any statement I make. My resume is
32 attached as Exhibit RC-1.

33 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

34 A. The purpose of my testimony is to provide the New Mexico Public Regulation
35 Commission ("Commission") with recommendations for conducting its impairment
36 analysis for the local switching Unbundled Network Element ("UNE"). MCI has asked
37 me to provide the Commission with the proper economic framework for conducting its
38 analysis consistent with the FCC's directions in the *Triennial Review Order*.¹ In
39 addition, I will present my market definition analysis, apply that market definition to the
40 FCC's prescribed trigger analyses, and discuss the Commission's task of evaluating the
41 prospect of potential deployment.

42 **Q. PLEASE SUMMARIZE YOUR TESTIMONY.**

43 A. I begin the substantive portion of my testimony with an analysis of the
44 appropriate market definition for the Commission's investigation. Economic theory and

¹ See Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carrier*, CC Docket No. 01-338, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, CC Docket No. 96-98, *Deployment of Wireline Services Offering Advanced Telecommunications Capability*, CC Docket No. 98-147, FCC 03-36, ¶ 495 (rel. Aug. 21, 2003) ("Triennial Review Order").

45 practice, as well as the FCC's guidance in its *Triennial Review Order* all suggest that the
46 wire center is the most appropriate starting point for an analysis of whether competitive
47 local exchange carriers ("CLECs") are impaired without access to unbundled switching
48 for mass-market customers. The following is a commonly accepted definition of wire
49 center:

50 This term is often used interchangeably with the terms central office and
51 switch. Technically, the wire center is the location where the local
52 exchange carrier terminates subscriber local loops, along with the testing
53 facilities necessary to maintain them. A wire center can be a building or
54 space within a building that serves as an aggregation point on a local
55 exchange carrier's network, where transmission facilities and circuits are
56 connected or switched. "Wire center" can also denote a building in which
57 one or more central offices, used for the provision of exchange services
58 and access services, are located.²
59

60 I also use the term "wire center" to describe the geographic area served by the
61 loops terminating at a wire center. According to Qwest Corporation's ("Qwest")
62 "Interconnection database", there are 65 wire centers in Qwest's service area in the State
63 of New Mexico,³ with about 811,000 loops in service, averaging some 12,476 loops in
64 service per wire center. The largest wire center has approximately 67,500 loops, the
65 smallest has 608. The number of loops in service in the largest 10 percent (6 wire
66 centers) average about 44,000, whereas the smallest 10 percent average 975 loops in
67 service.

² See, http://www22.verizon.com/wholesale/glossary/0,2624,W_7,00.html; Also, Qwest defines a wire center in its New Mexico Access Service Tariff, Section 2, Page 82, Release 4, effective 04-01-01, as: "Denotes a building in which one or more central offices, used for the provision of Telephone Exchange Services, are located."; and in its New Mexico Private Line Transport Services Tariff, Section 2, Page 48, Release 1, effective 01-01-2002, as "Denotes a building in which one or more central offices, used for the provision of Telephone Services, are located."

³ See, http://www.qwest.com/cgi-bin/iconr/iconn_centraloffice.pl

68 Use of the wire center as the basic building block for analysis accomplishes the
69 FCC's goals of a granular analysis that maximizes accuracy of results, subject to the
70 constraints of practicality.⁴ In addition, a wire-center market definition makes sense
71 because the wire center is the place where Qwest and other incumbent local exchange
72 carriers' ("ILECs" or "incumbents") local switches actually reside and the wire-center
73 boundaries accurately define the physical territory that at least some competitors or
74 potential competitors might no longer be able to serve should the Commission find "no
75 impairment" without access to unbundled local switching at any particular switch.
76 Hence, a wire-center market definition is a practical choice as well.

77 In contrast, a market definition based on a larger geographic area, such as the
78 Metropolitan Statistical Area ("MSA"), creates a significant risk that trigger or potential
79 deployment analyses based on such a market definition will result in a finding of no
80 impairment in places where multiple, competitive supply does not exist today and is
81 unlikely to occur in the foreseeable future.

82 I urge the Commission to adopt the wire center as the starting point for all
83 subsequent impairment analyses. I also recommend that the Commission adopt a product
84 market definition that includes all local exchange service options that provide service at a
85 cost, quality and maturity equivalent to Qwest's offerings. This product market
86 definition should explicitly exclude Commercial Mobile Radio Service ("CMRS"), fixed
87 wireless and cable telephony.

88 I next provide my analysis and recommendations for the Commission's trigger
89 analyses. I recommend that the Commission conduct its trigger analysis (and any

⁴ *Triennial Review Order* ¶ 130.

90 subsequent potential deployment analysis) in a way that evaluates whether (1) residential
91 and small business customers should be treated as being in separate markets,⁵ even at the
92 wire-center level, and (2) whether customer locations served over integrated digital loop
93 carrier ("IDLC") should be treated as residing in a separate submarket for which
94 unbundled switching would continue to be available, even if a finding of no impairment
95 were otherwise justified for the remainder of a given wire center. In any event, the
96 Commission should take note of companies that are not actively providing residential
97 service with their own switches (*i.e.*, companies that only provide business service).
98 Such companies provide no evidence of actual mass-market entry, beyond the business
99 segment they actually serve, and should not be counted in the Commission's trigger
100 analyses as instances of actual entry that provide evidence of overcoming barriers to
101 entry that have not, in fact, been overcome.

102 The FCC has made a national finding of impairment with respect to mass-market
103 switching.⁶ The Commission should not find that the trigger requirements have been
104 satisfied unless and until the Commission determines that all mass-market customers in
105 that market have a real and current choice among three carriers who are providing local
106 service via their own switching using Qwest's loop plant.

⁵ As I explain in detail later in this testimony, my suggestion that the Commission consider whether there are separate residential and small business markets is intended as a subdivision of the broader mass market, which the FCC has defined in light of the crossover between serving customers via voice-grade loops (which it calls DSOs) and serving them via high-capacity DS-1 loops. 47 C.F.R. § 51.519(d)(2)(iii)(B)(4). Selecting a breakpoint between mass market and enterprise customers is a complex and necessarily customer-specific endeavor. In Section III.E below, I recommend that the Commission adopt the approach proposed by Verizon in other jurisdictions to allow the market to "validate" the efficient crossover point.

⁶ *Triennial Review Order* ¶ 459.

107 Pursuant to the rules set forth by the FCC in the *Triennial Review Order*, a carrier
108 can only be considered as a triggering company for mass-market switching if it meets
109 specific requirements in the following four areas: (1) corporate ownership; (2) active and
110 continuing market participation; (3) intermodal competition; and (4) scale and scope of
111 market participation. Applying these criteria rigorously in a properly defined market is
112 essential to ensuring that “[i]f the triggers are satisfied, the states need not undertake any
113 further inquiry, *because no impairment should exist in that market.*”⁷

114 At this point, I have not identified any wire centers in Qwest’s service territory for
115 which I believe that either the wholesale or retail trigger has been met. I will, however,
116 respond to Qwest’s trigger-based claims of no impairment, if any, in the next round of
117 my testimony. At that time, I will also identify whether there may be any “exceptional
118 circumstances” that would warrant overriding a finding of no impairment, if in fact such
119 finding were justified based on the evidence.

120 Finally, I provide my analysis and recommendations for the Commission’s
121 potential deployment analysis. In the absence of clear evidence of no impairment in the
122 form of actual self-provisioning by CLECs or wholesale trigger analysis that satisfies the
123 “bright-line rule” of the FCC’s prescribed trigger analysis, the analysis may proceed to
124 the possibility of potential deployment to test whether barriers to entry without unbundled
125 access to a network element are “likely to make entry into a market uneconomic,” or
126 whether the market in question is “suitable for ‘multiple, competitive supply.’”⁸ This
127 analysis must be conducted on a market-by-market basis, analyzing the same markets that
128 are used in the trigger analyses. At this stage of the analysis, the Commission must

⁷ *Id.* ¶ 494 (emphasis added).

129 consider any local switching capacity of market participants identified in the trigger
130 analyses in concert with analysis of operational and economic barriers to entry.

131 In concert with analysis of operational barriers and any actual entry, an analysis of
132 potential deployment evaluates CLEC costs and anticipated revenues to determine
133 whether CLEC operations without access to unbundled local switching are likely to be
134 profitable and support multiple competitive entry. My testimony provides a discussion of
135 the types of costs and revenues that the Commission should consider in a potential
136 deployment analysis, and I discuss the interpretation of results from such an analysis.
137 The remainder of my testimony explains the basis for each of these conclusions and
138 recommendations.

139 **Q. HOW IS YOUR TESTIMONY ORGANIZED?**

140 A. The following introductory Impairment Analysis section (Section II) places the
141 issues in this proceeding into context. The body of my testimony is organized to
142 correspond to the two-step analytical process outlined by the FCC. The first of these
143 steps encompasses market definition and analysis of triggers, which I address in that
144 order (Sections III and IV of my testimony, respectively). The second step pertains to
145 "post-trigger" analysis and is split into two sub-steps, the first of which addresses further
146 inquiry into markets where there is a claim that triggers are satisfied (Section V.A of my
147 testimony) and the second of which addresses the analysis of potential deployments in
148 markets where triggers are not satisfied (Section V.B of my testimony). I present my
149 conclusions in Section VI.

⁸ *Id.* ¶¶ 84, 506.

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

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**DIRECT TESTIMONY
OF
CEDRIC COX
ON BEHALF OF
WORLDCOM, INC. ("MCI")**

Public Version

February 16, 2004

26 the numerous current customer-impacting operational barriers that must be eliminated in
27 order for MCI to make this transition fully. My testimony also explains that if MCI were
28 forced to switch to its own facilities on a flashcut basis because unbundled local
29 switching was prematurely eliminated, customers and competitors would face severe
30 negative consequences.

31 **II. SUMMARY OF TESTIMONY**

32 **Q. Please summarize your testimony.**

33 A. Qwest Corporation ("Qwest") is asking the Commission to remove switching as
34 an unbundled network element ("UNE") in various parts of this state. In practical terms,
35 if the Commission grants that request, it means that the UNE platform as we know it
36 today will be reduced or disappear. If MCI is able to move to its own facilities to provide
37 service to mass market customers in a methodical and coordinated manner, elimination of
38 Qwest switching may not have significant consequences for customers, depending on
39 when and where the cutover occurs. However, premature withdrawal of switching before
40 the appropriate processes and systems are in place will have significant adverse
41 consequences for consumers, carriers and competition.

42 In this testimony, I lay out some of the operational challenges (and proposed
43 solutions) that exist for carriers, like MCI, that are moving to their own facilities for mass
44 markets customers.¹ Other operational challenges relating directly to network and
45 technology challenges are presented in Mr. Gates' testimony. The operational issues
46 addressed in my testimony relate to the "customer's experience" as she or he attempts to
47 switch carriers, not just to MCI from Qwest, but to MCI from other competitive local

¹ Additional operational issues will likely arise as MCI begins to move to UNE-L to serve the mass market.

48 exchange carriers ("CLECs"), and away from MCI to Qwest or other CLECs. These
49 issues stem from, in one way or another, the physical changes required when a CLEC
50 uses its own facilities in conjunction with Qwest unbundled loop, and the difficulty in
51 exchanging information about customers between all carriers in the seamless manner that
52 mass market customers who tend to switch carriers frequently have come to expect.
53 Specifically, the issues that we have identified here as well as those in the network
54 operational testimony must be fully defined and resolved before UNE-L can become a
55 reality for the mass market. The issues in my testimony are summarized below as are the
56 proposed solutions or first steps recommended by MCI to address these issues.

57 1. Standard processes and procedures must be developed to obtain
58 and share customer service records ("CSR"). MCI proposes that a distributed
59 database be developed, shared and maintained by incumbent local exchange
60 carriers ("incumbents" or "ILECs") and competitors alike.

61 2. Loop information databases must be accurate and current.
62 MCI proposes that these databases be audited for accuracy and a process be
63 developed to ensure timely maintenance.

64 3. Trouble handling processes must be adapted for a mass market
65 world. MCI proposes that all parties develop internal processes (if they do not
66 already exist) to ensure that trouble handling functions properly in a world with
67 mass market volumes.

68 4. The industry must ensure that required E911 changes are
69 sequenced correctly and occur efficiently. MCI proposes that a collaborative
70 forum be convened to ensure compliance with existing standards as well as

71 coordination among industry participants including the Public Service Answering
72 Points ("PSAPs") in New Mexico to ensure that all parties can handle the
73 increased volume of transactions.

74 5. The industry must ensure that number portability processes that are
75 in place are coordinated and can handle mass market volumes. MCI proposes that
76 the commission convene a collaborative that includes the third party administrator
77 to determine the systems capabilities in a mass market environment. In addition,
78 MCI proposes that a scalability analysis be conducted to confirm that capability.

79 6. The directory listing process must be evaluated for efficiency in a
80 mass market UNE-L environment. MCI proposes that process be developed to
81 limit the number of times the directory information must be inserted and deleted
82 from the directory.

83 7. The industry must ensure that the caller name and line information
84 databases can be accessed and loaded with minimal inaccuracy. MCI proposes
85 that competitors be allowed to obtain a "dump" of the incumbent's databases to
86 ensure accuracy and quality service.

87 For CLECs, these operational barriers impair their ability to use their own
88 facilities effectively when serving mass market customers. But even more important,
89 these operational difficulties create frustration and potentially serious problems for
90 consumers, including the inability to make or receive calls, errors in the 911 address data
91 base, and the need to re-program/re-install some customer-programmable features. In
92 discussing the complex technical issues involved in transitioning carriers from existing
93 UNE-P arrangements to UNE loops connected to CLEC switches, it is easy, sometimes,

94 to forget about the effect of such a transition on the customer. Competitive carriers, like
95 MCI, must place an emphasis on making the transition transparent to the customer onto
96 or off of MCI's services. At the end of the day, ultimately this is about the consumer
97 and the quality of service she or he will receive when making competitive choices.

98 It is one thing to identify problems that CLECs encounter in a dynamic and
99 rapidly shifting market, but it is another to find solutions to these problems. As part of
100 this proceeding, MCI will be asking for this Commission's help in removing operational
101 barriers and impairments so that MCI (and other CLECs) can use their own facilities to
102 interconnect efficiently with Qwest and provide service to mass markets customers
103 instead of always having to rely on leasing Qwest's facilities.

104 **III. OPERATIONAL IMPAIRMENT AS RECOGNIZED BY THE FCC**

105 **Q. Does MCI currently provide local services to residential customers in New**
106 **Mexico?**

107 **A.** Yes. After years of laying the necessary operational and regulatory groundwork,
108 MCI began providing local service to New Mexico residential and small business
109 consumers via UNE-P in January 2003. MCI now serves thousands of New Mexico
110 consumers using UNE-P, the only service delivery method that has proved successful
111 thus far in bringing local service to the mass market. MCI would like to move its New
112 Mexico customers to UNE-L when it is operationally and economically feasible, since it
113 would prefer to serve these customers whenever possible over its state-of-the-art network
114 and because it wants to provide voice and DSL service using the same network and
115 promote further innovation of its products and services through development and
116 deployment of new technology. Moreover, as MCI begins to roll out its broadband

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Cut Process)	
)	
<u>And</u>)	
In the Matter of Impairment In Access To)	Case No. 03-00404-UT
Local Circuit Switching for Mass Market)	
Customers)	

Direct Testimony of

Ben Johnson, Ph.D.

Ben Johnson Associates, Inc.

on behalf of

AARP

March 1, 2004

1 **Introduction**

2

3 **Q. Would you please state your name and address?**

4 A. Ben Johnson, 2252 Killearn Center Boulevard, Tallahassee, Florida 32309.

5

6 **Q. What is your present occupation?**

7 A. I am a consulting economist and president of Ben Johnson Associates, Inc., an economic
8 research firm specializing in public utility regulation.

9

10 **Q. Have you prepared an appendix that describes your qualifications in regulatory and**
11 **utility economics?**

12 Q. Yes. Appendix A, attached to my testimony, serves this purpose.

13

14 **Q. Does your testimony include any attachments?**

15 A. Yes. I have attached 4 maps. These maps were prepared under my supervision and are true
16 and correct to the best of my knowledge.

17

18 **Q. What is your purpose in making your appearance at this hearing?**

19 A. Our firm has been retained by AARP to assist in the evaluation of the extent to which
20 competitors serving mass market customers are "impaired" without access to unbundled local
21 switching, consistent with the Triennial Review Order (TRO) of the Federal Communications
22 Commission (FCC).

23 Due to time and resource constraints, I do not discuss every issue facing the New
24 Mexico Public Regulation Commission (Commission) in this proceeding. In this direct
25 testimony, I primarily focus on issues related to the first step in the Commission's analysis:

26

1 ...the *Triennial Review Order* makes clear that as part of its
2 operational and economic analysis, a state must determine the
3 appropriate cut-off for multi-line DS0 customers, the so-called cross-
4 over point to an enterprise market, as part of its granular review. The
5 *Triennial Review Order* also makes clear that a state commission must
6 first define the market or markets in which it will evaluate impairment by
7 determining the relevant geographic area to include in each market.
8 [First Amended Procedural Order, January 23, 2004, p. 4]
9

10 In general, I stress the importance of properly defining the market, and the risk of inadvertently
11 reaching conclusions concerning impairment that are valid for mass market small business
12 customers but are not valid for residential customers (e.g., those with low incomes or living on a
13 fixed income). The Commission should take great care to ensure that the effect of its decisions
14 in this proceeding is not to prevent competitive local exchange carriers (CLECs) from serving
15 these residential customers. CLECs should be allowed to use switching UNEs to serve
16 residential customers if it is not economically feasible for them to serve these customers using
17 their own switch.
18

19 **Q. Would you please describe how your testimony is organized?**

20 A. Yes. In the first section, I briefly sketch the background of this investigation, focusing on the
21 Commission's activities and certain portions of the TRO issued by the FCC. In the second
22 section, I discuss various possible approaches to defining the appropriate geographic market
23 for use in developing the impairment analysis. In the third section, I consider evidence available
24 to the Commission which will enable it to appropriately define the class of customers that are
25 classified as "mass market." In the fourth section, I discuss the important distinctions between
26 business and residence customers--distinctions that are crucially important in reaching an
27 appropriate result in this proceeding. In the fifth section, I briefly set forth my initial
28 recommendations.

1 Q. Would you please briefly summarize the thrust of your testimony?

2 A. Yes. The Commission should adopt a relatively narrow geographic market definition, based
3 upon small clusters of wire centers having homogeneous characteristics. In its Initial Status
4 Report filed on December 19, 2003, Qwest Corporation (Qwest) responds as follows to the
5 requests made of it in the Commission's November 17, 2003 Procedural Order.

6

7 1. Regions of Qwest's New Mexico Service Area Where
8 Qwest Intends to Claim the Triggers Have Been Met
9 with Respect to Mass Market Switching.

10

11 Qwest believes, based on its current information, that the three-switch
12 trigger is satisfied in the Albuquerque Metropolitan Statistical Area
13 ("MSA").

14

15 2. Regions of Qwest's New Mexico Service Area Where
16 Qwest Intends to Claim the Potential for Deployment of
17 Competitive Switches Militates Against a Finding of
18 Impairment Pursuant to the Granular Inquiry.

19

20 In addition to the Albuquerque MSA, there are three other MSAs in
21 New Mexico: Santa Fe, Las Cruces, and Farmington. ... Depending on
22 the results of its analyses, Qwest may claim that competitors would not
23 be impaired in serving mass market customers in one or more of these
24 MSAs without access to unbundled local switching from Qwest.
25 [Qwest's Initial Status Report, December 19, 2003, pp. 1-2]

26

27 I have not prepared a detailed analysis of Qwest's factual claims with regard to whether or not
28 the trigger has been met. I anticipate commenting on these claims in my rebuttal testimony, once
29 I have had an opportunity to further review the direct testimony submitted by Qwest, the
30 CLECs and other parties.

31

32 Regardless of whether or not the trigger has been met, I disagree with Qwest's
proposal to declare entire MSAs as the relevant geographic markets for use in this proceeding.

1 Such a geographic market definition is far too broad. Among other problems, it greatly
2 increases the risk of inadvertently reaching a conclusion of non-impairment that is only valid
3 with respect to a portion of the MSA—a conclusion that is not valid for other portions of the
4 MSA.

5 Second, considering differences in revenue and profit levels, residential and small
6 business mass market customers should be studied separately throughout this proceeding. In its
7 TRO, the FCC recognized the potential importance of demand differences (e.g., average
8 revenue levels) and it asked state commissions to perform granular analyses. If the Commission
9 ignores important differences between residential and small business mass market customers, it
10 may develop an impairment analysis that is not sufficiently granular in nature, or that reaches
11 conclusions that are only valid for small business customers—conclusions that are not valid for
12 residential customers.

13
14 **Background**

15
16 **Q. Could you begin your background discussion by explaining how the FCC defines the**
17 **mass market?**

18 **A. Yes. The FCC defines the mass market as follows:**

19
20 The mass market for local services consists primarily of consumers of
21 analog “plain old telephone service” or “POTS” that purchase only a
22 limited number of POTS lines and can only economically be served via
23 analog DS0 loops. [TRO, ¶ 459]
24

25 **Q. What has the FCC found regarding mass market switching specifically?**

26 **A. In the TRO, the FCC found that, on a national basis, “competing carriers are impaired without**
27 **access to unbundled local circuit switching for mass market customers.” [Id.] The FCC’s**

127]

In this passage, the FCC recognizes that profit margins in serving smaller customers are tighter than those available when serving larger customers, and this clearly has important implications in determining whether or not impairment exists. While the FCC didn't focus specifically on differences in average revenues per line or per customer, the overall thrust of this reasoning is consistent with an approach which draws such a distinction. As the revenue per customer declines, it becomes less and less feasible to profitably serve a customer using a CLEC's own switch, because insufficient profit margins exist to overcome the fixed (per-customer) costs of providing service using the CLEC's own facilities.

For this reason, one would anticipate that relatively few CLECs will serve residential customers using their own switches. Rather, CLECs that use their own switches primarily focus on serving larger customers—those generating much higher revenues per customer. As the FCC has recognized:

...although serving these customers is more costly than mass market customers, the facts that enterprise customers generate higher revenues, and are more sensitive to the quality of service, generally allow for higher profit margins." [Id., ¶ 128]

Unless these differences in customer characteristics and gross profit margins are adequately considered in defining the market, and there is a great risk of inadvertently reaching conclusions concerning impairment that are only valid for mass market small business customers—conclusions that are not valid for residential customers.

Q. Do you have any recommendations with regard to the distinction between residential and business (or low and high revenue) customers?

A. Yes. To the extent it is legally permissible, it could be helpful to stratify each geographic market

1 in order to analyze business and residential customer data separately. If this is done, the analysis
2 of whether or not impairment exists could be performed separately with respect to business and
3 residential customers. Thus, for example, even if there is reason to believe a "trigger" has been
4 pulled (due to the presence of multiple CLECs) for the small business market or segment, this
5 wouldn't automatically force the Commission to conclude that the "trigger" has also been pulled
6 for the residential market or segment.

7 Another option would be to distinguish between the "enterprise" and "mass" market on
8 the basis of revenue per customer, or on the basis of gross profit margin per customer
9 (revenues minus direct costs), rather than purely on the basis of the number of DS0 lines. This
10 could lead to more accurate and homogenous market classifications than a system based purely
11 on the number of lines used by each customer (e.g., four DS0 or 12 DS0 lines).

12 For instance, rather than placing all customers with three or less lines in the "mass"
13 market, the Commission might place all customers generating revenue of less than \$100 per
14 month in the "mass" market. With a classification system of this type, the Commission may find
15 it has greater flexibility in determining the most appropriate "breakpoint" and thus it will have an
16 enhanced ability to ensure that the defined markets are sufficiently homogenous.

17 Revenue-based market definitions would better enable the Commission to take into
18 account differences in underlying market conditions, including typical rate structures, rate levels,
19 and gross profit margins associated with different types of customers. This is consistent with
20 language in the TRO that requires state commissions to take into account "the variation in
21 factors affecting competitors' ability to serve each group of customers, and competitors' ability
22 to target and serve specific markets economically and efficiently using currently available
23 technologies." [Id., ¶ 495]

24 Regardless of what specific approach the Commission ultimately adopts, it should take
25 great care to ensure that its decisions do not prevent CLECs from serving residential
26 customers. CLECs should be allowed to continue using switching UNEs to serve residential

BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

**IN THE MATTER OF IMPLEMENTATION)
OF A BATCH HOT CUT PROCESS _____)**

CASE NO. 03-00403-UT

And

**IN THE MATTER OF IMPAIRMENT)
IN ACCESS TO LOCAL CIRCUIT)
SWITCHING FOR MASS MARKET)
CUSTOMERS _____)**

CASE NO. 03-00404-UT

[PUBLIC VERSION]

DIRECT TESTIMONY OF

DAVID BREVITZ

ON BEHALF OF

THE NEW MEXICO ATTORNEY GENERAL

MARCH 1, 2004

**NMPRC
STAFF EXHIBIT**

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